

Hon. Ronald B. Leighton

UNITED STATES DISTRICT COURT  
WESTERN DISTRICT OF WASHINGTON  
AT TACOMA

EAGLE HARBOUR CONDOMINIUM  
ASSOCIATION, a Washington nonprofit  
corporation,

Plaintiff,

v.

ALLSTATE INSURANCE COMPANY,  
an Illinois corporation,

Defendant.

No: 3:15-cv-05312-RBL

**DECLARATION OF MICHAEL LUDWIG**

Michael Ludwig, on oath, deposes and states:

1. I am over the age of 18, competent to testify, and do so of my own personal knowledge. I am a Senior Building Envelope Technologist at BET&R. I have over 30 years of experience in building envelope construction, cladding and fenestration issues, and water intrusion investigation. I have personal knowledge of all of the facts set forth in this Declaration and if called upon to testify, I could and would testify competently thereto.

2. In 2004, the Eagle Harbour Condominium Association (the "Association") hired BET&R to evaluate the Eagle Harbour condominium complex and identify areas of damage and water intrusion. It was BET&R's understanding that the Association wanted to repair all damage and water intrusion prior to painting the condominium complex.

3. Before conducting the investigation at Eagle Harbour, BET&R reviewed previous building inspection reports issued by Architectural Building Inspection, Inc. ("ABI") and Chris Ugles. The ABI and 1999 Ugles reports which I have read both involved a limited visual inspection of the Eagle Harbour Condominium complex. The reports primarily

1 recommended making repairs to some of the decks and the flat roofs above the walkways.  
2 Because the ABI and 1999 Ugles investigations were non-invasive visual inspections, the  
3 reports did not visually evaluate the condition of exterior wall sheathing and framing which was  
4 hidden behind the stucco siding.

5 4. Eagle Harbour Condominium Records show that the repairs recommended by  
6 Ugles and ABI were generally completed prior to BET&R's involvement with Eagle Harbour.  
7 Pages 14 to 15 of BET&R's May 2004 Eagle Harbour Building Envelope Evaluation Report  
8 discuss the repairs made by the Association in response to the ABI and Ugles's reports. The  
9 Association repaired Phase I and II decks, walkway and steep-slope roofs, and exposed columns  
10 at the walkways. A true and correct copy of BET&R's 2004 Building Envelope Evaluation  
11 report is attached as Exhibit 1.

12 5. In pages 4-5 of Allstate's Motion for Summary Judgment, Allstate inserts several  
13 photos from the 1999 Chris Ugles report. In page 4 of its Motion, Allstate claims that these  
14 pictures "...evidenced damage to sheathing under stucco, the roof, and the walls." Allstate's  
15 statement is false. The pictures show damage to the exterior surface of stucco, interior dry wall,  
16 and one area of the roof. Based on my 30 years of experience in the construction industry, it is  
17 impossible to determine from these photos whether there is hidden damage to sheathing and  
18 framing behind the exterior stucco, interior dry wall, and roof. In addition these areas of  
19 concern appear to have been repaired prior to 2004.

20 6. BET&R conducted an investigation of the Eagle Harbour condominium complex  
21 in 2004. The investigation involved use of infrared thermography and moisture meter readings.  
22 BET&R drilled several small quarter-inch holes in order to take the moisture meter readings. It  
23 is not possible to perform a visual inspection of the condition of exterior wall sheathing and  
24 framing via quarter-inch holes. During BET&R's 2004 investigation, no exterior cladding was  
25 removed from the walls, and exterior wall sheathing and framing remained hidden from view  
26 behind the existing stucco cladding.

1           7.       BET&R's 2004 investigation did not reveal widespread water damage  
2 throughout the Eagle Harbour Condominium complex. Instead the results of our infrared  
3 thermography and moisture meter survey indicated specific areas that potentially had water  
4 damage and should be investigated further. These areas primarily included: the Phase I  
5 chimney chase; the Phase II stair towers; and certain Phase I decks. Based on our building  
6 envelope evaluation, BET&R did not conclude that there was widespread hidden damage to  
7 wall sheathing and framing throughout the condominium complex.

8           8.       Areas of the building that our report identified as potentially having water  
9 damage were primarily uninhabited areas such as the Phase II towers. These areas receive less  
10 heat and are less able than the inhabited main buildings to evaporate or dry-down any water  
11 intrusion that may occur.

12          9.       As a result of our 2004 investigation, BET&R recommended that the Association  
13 delay the proposed painting project. Instead, BET&R advised the Board that the problem areas  
14 identified in our 2004 Building Envelope Evaluation Report should be repaired prior to coating  
15 the stucco claddings throughout the complex.

16          10.      Following the issuance of BET&R's 2004 Building Envelope Evaluation report,  
17 the Association began a three year repair project at the Eagle Harbour Condominium complex.  
18 BET&R's main role as part of the repair project was to compile requested technical  
19 specifications and design details, and perform limited spot-check monitoring of the repair work  
20 to help ensure that the design details were followed and review the Contractor's work on behalf  
21 of the Association.

22          11.      The 2004 BET&R report included a priority list of repairs to assist the  
23 Association with planning the repair of damage caused by water intrusion prior to the coating  
24 project. The Association worked diligently to accomplish repairs on the priority repair list  
25 provided by BET&R prior to coating the cladding at the complex.  
26

1           12. By the end of 2005, the Association had completed several of BET&R's  
2 recommended repairs including repairs to Phase I decks, structural repairs to Phase I walkways,  
3 and replacement of the non-waterside Phase I roof.

4           13. In February and March of 2006, BET&R conducted an additional select moisture  
5 meter survey in an effort to determine if there were additional undiscovered areas of water  
6 intrusion prior to the coating project. Damage was identified primarily in the areas that were  
7 already scheduled for upcoming repair such as the Phase I chimney chase. The Association  
8 repaired the damage identified in the 2006 survey prior to the coating project.

9           14. In August 2006, BET&R provided the Board with a Memo which described the  
10 results of the February and March 2006 moisture meter survey. Page 1 of the Memo stated that:

11           “During our survey, we did not discover evidence of widespread damage  
12 resulting from leaks....It appears some water does enter the building in some  
13 locations but it appears to find its way out with minimal damage.”

14           15. In page 6-8 of Allstate's Motion, Allstate includes several pictures which  
15 Allstate claims demonstrate “rot and decay damage to framing and sheathing.” The pictures in  
16 pages 6-8 of Allstate's Motion were taken directly from BET&R's October, 2006 Field Report  
17 no. 6, pages 2-5. The pictures in pages 6-8 of Allstate's Motion are of damage to sheathing and  
18 framing at the Phase 1 chimney chase and were taken by BET&R during the chimney chase  
19 repair project. The Association repaired this damage to the chimney chase by 2007 prior to the  
20 coating project. Contrary to Allstate's statement in the Motion, the results of BET&R's 2004  
21 and 2006 survey, and the subsequent repairs which BET&R oversaw from 2004-2007, did not  
22 indicate that the damage to sheathing and framing exposed during repair of the Phase I chimney  
23 chase would be widespread throughout the condominium complex.

24           16. By the end of 2006 the Association's contractors had repaired the Phase II stair  
25 towers, performed waterproofing repairs to the Phase II parking garage, reroofed Phase I and  
26 Phase II non-waterside roof areas, rebuilt and re-sided the Phase II bay window areas, and  
repaired and rebuilt additional Phase I decks.

1           17.     In May, 2007 BET&R created a technical specification section/scope of work  
2 which set forth the requirement for the Association's upcoming coating project. According to  
3 page 1 of the specifications:

4           The purpose of the Exterior Wall Coating Project is to provide a vapor  
5 permeable, elastomeric, waterproof and face-seal barrier-type coating system  
6 over the exterior cladding of the Phase I and Phase II buildings, carports, and  
7 stucco clad towers.

8           On page 3, the specifications go on to say:

9           The Eagle Harbour Condominium Association (EHCA) has worked during the  
10 past three years to identify locations of damage behind cement plaster cladding  
11 of Phase I and Phase II buildings. The locations of known damage have been  
12 repaired.

13           These comments reflected BET&R's belief that the Association had repaired  
14 known damage to the Eagle Harbour condominium complex prior to the start of the  
15 coating project. Upon remediating the damage, it was BET&R's recommendation that  
16 the Association apply a "permeable, elastomeric, waterproof barrier" to the stucco. The  
17 purpose of this water proof barrier was to prevent future water intrusion. BET&R  
18 advised the Association that with proper maintenance the barrier system's lifespan  
19 would be at least 12-16 years. A true and correct copy of the contract specification is  
20 attached as Exhibit 2.

21           18.     The Association was initially presented with the option of using regular  
22 color-coat paint for the painting project, which BET&R advised would provide limited  
23 weather-protection and primarily be an aesthetic solution. The Board rejected the use of  
24 regular paint even though it was significantly cheaper, as it did not provide significantly  
25 improved protection against water intrusion.  
26

1           19.     In 2007 BET&R oversaw application of the barrier system by Grund &  
2 Co. Page 2 of Field Report no. 18 issued by BET&R states that “In general, the coating  
3 project continues to progress well.” This statement reflected BET&R’s belief that  
4 Grund & Co. did a generally good job of applying the barrier coating system.

5           20.     From 2007 to 2013 BET&R was not made aware of any additional water  
6 intrusion issues at Eagle Harbour. During this time period BET&R had every reason to  
7 believe that that the elastomeric sealer coating applied in 2007 remained effective at  
8 mitigating water intrusion.  
9

10          21.     Page 9 of Allstate’s Motion states that:

11           “...during the next seven years EHCA continued to experience significant  
12 damage to the exterior of the building. For example a May 12, 2008  
13 memorandum from EHCA’s building repairs and maintenance representative  
14 informed the Board that the lower priority repairs identified in 2004 had become  
15 “immediate threats and need repair.””

16           Allstate’s statement in its Motion for Summary Judgment that the Association’s  
17 failure to immediately make the repairs mentioned in the May 12, 2008 memorandum  
18 resulted in significant damage to the exterior of the Eagle Harbour condominium  
19 complex is false. The May 12, 2008 memorandum which I have read primarily  
20 discusses repairs of visible damage to the elevated walkways, excavating a planter, and  
21 coating exposed walkway beams. Based on my 30 years of experience in the  
22 construction industry, none of these repairs are related to hidden damage behind the  
23 stucco on the main buildings and Phase 1 towers which are at issue in this lawsuit.

24          22.     In 2014 BET&R was called back to Eagle Harbour to oversee repairs to the  
25 Phase I stair and elevator towers. Repairs to both towers began in September 2014. In  
26 September 2014 BET&R observed test openings in the interior of the Phase I elevator

1 tower to assess the condition of the tower. These openings revealed extensive damage  
2 to sheathing and framing.

3 23. The Phase I towers are free standing structures, not connected to the main  
4 Phase I building by a shared wall. The Phase I towers are uninhabited. As a result the  
5 towers receive less heat and are less able than the inhabited main buildings to evaporate  
6 or dry-down any water intrusion that may occur. It was impossible to determine from  
7 the condition of the Phase I stair tower whether there was hidden damage to the wall  
8 sheathing and framing of the main buildings.  
9

10 24. After discovery of extensive damage to the Phase I stair tower, the Association  
11 asked BET&R to investigate whether there was ongoing water intrusion and moisture related  
12 damage in the main buildings. In August 2014, BET&R made a total of 16 test openings as part  
13 of an intrusive investigation of the main Phase I and Phase II buildings. Seven openings were  
14 made in the Phase I building and nine openings were made in the Phase II Building.  
15

16 25. The exploratory openings were made at specific locations chosen by BET&R to  
17 determine if there was water damage to sheathing and framing throughout the main buildings.  
18 From visually examining the conditions of sheathing and framing via several large exploratory  
19 openings, BET&R determined that there was hidden damage to sheathing and framing at the  
20 main buildings particularly around windows, penetrations through the cladding system, and at  
21 joints in the stucco cladding.  
22

23 26. Prior to the August 2014 intrusive investigation, to the best of BET&R's  
24 knowledge, damage to sheathing and framing at the main buildings remained hidden behind  
25 exterior siding. Prior to the August 2014 intrusive investigation, any damage to exterior wall  
26 sheathing and framing in the main buildings observed by BET&R had been promptly repaired

1 by the Association.

2 27. In 2014, the Association, via its attorneys, asked for a report regarding the causes  
3 of the hidden damage to sheathing and framing at Eagle Harbour, and the work that is necessary  
4 to identify and repair the damage. Attached as Exhibit 3 is a true and correct copy of BET&R's  
5 Limited Exterior Wall Survey Report dated March 13, 2015. The report accurately describes  
6 BET&R's opinions regarding the causes of the hidden damage to sheathing and framing at the  
7 Eagle Harbour condominium complex, and the work that is necessary to identify and repair the  
8 damage. The opinions set forth in the report are incorporated herein and made a part hereof by  
9 this reference as though set forth herein in full.  
10

11 28. The August 2014 investigation uncovered gypsum sheathing in exterior walls  
12 that had been damaged by water intrusion. The damaged gypsum sheathing was hidden behind  
13 siding and could not be observed until siding was removed. The hidden damage was caused by  
14 water intrusion. The water intrusion was caused by a combination of rain (primarily wind-  
15 driven rain) and inadequate construction.  
16

17 29. Exposure to water causes mold or mildew growth causes the paper facer to  
18 disbond from the gypsum core, causes the gypsum core to break into pieces or deconsolidate,  
19 and eventually causes the sheathing to crumble. At the Eagle Harbour condominium complex  
20 most of the exterior wall sheathing we observed in 2014 appeared to demonstrate mold/mildew  
21 growth, disbonded paper, and embrittlement, but had not yet fully deconsolidated. This process  
22 of mold/mildew growth, disbonding, and embrittlement likely progressively worsened each year  
23 as the sheathing was exposed to water intrusion from significant storm events.  
24

25 30. During BET&R's intrusive investigations in August 2014 less than .04% of the  
26 stucco on the exterior walls at the Phase I and II main buildings was removed. Thus, less than



1 .04% of the exterior-wall sheathing was exposed to view. However, due to the prevalence of  
2 damage and evidence of water intrusion observed at all test openings, we extrapolated that all of  
3 the exterior-wall sheathing has likely been damaged by water intrusion.

4 31. In my opinion the hidden damage to sheathing and framing at the Eagle Harbour  
5 condominium occurred incrementally and progressively each year from 1979 through 2014.  
6 During each significant storm event from 1979 through 2014, wind-driven rain penetrated  
7 behind the trim and siding and damaged the gypsum sheathing in the exterior walls, although it  
8 is likely that the water intrusion was greatly reduced for a period of time following the coating  
9 project in 2007.  
10

11 32. In order to identify the damage to exterior-wall sheathing caused by water  
12 intrusion it will be necessary to remove all of the siding. In order to repair the damage all of the  
13 gypsum sheathing must be removed and replaced with new sheathing.

14 33. Smith & Huston, the engineering firm retained by Allstate, prepared a report  
15 dated May 29, 2015. Smith & Houston agreed that water intrusion had been causing  
16 progressive damage to sheathing and framing for many years. In page 13 of its reports, Smith &  
17 Houston found that moisture intrusion had continuously and progressively been occurring in the  
18 main Phase I and Phase II buildings since the dates of original construction (1980 and 1984  
19 respectively). In its report, Smith & Huston does not discuss whether the existing exterior wall  
20 sheathing should be removed and replaced with new sheathing. Nor does Smith & Huston  
21 express an opinion regarding extrapolated damage: whether hidden damage had likely occurred  
22 at the exterior wall sheathing that had never been previously exposed to view. Attached as  
23 Exhibit 4 are true and correct copies of the Smith and Huston reports dated May 29, 2015.  
24  
25  
26

1           34.     The Association is seeking coverage for damage and repair costs to accomplish  
2 the repairs described in the BET&R report, including extrapolated damage to all of the gypsum  
3 sheathing in the exterior walls. BET&R is extrapolating that all of the concealed gypsum  
4 sheathing has been damaged by water intrusion even though 99.96% of the exterior sheathing  
5 was not exposed to view during the investigations in August 2014.

6           35.     I have reviewed Allstate's motion for summary judgment. Allstate's statement in  
7 the Motion that "the damage for which EHCA now seeks coverage was revealed to it years  
8 before and has ceased being "hidden" far longer than the one year suit limitation" is false.  
9 BET&R observed several areas of exterior-wall sheathing in 2014 that appeared to have never  
10 been previously exposed to view.

11           36.     In addition, with respect to the extrapolated damage (to the 99.96% of the  
12 exterior-wall sheathing that was not exposed to view during our investigations in 2014),  
13 Allstate's position that the damage was previously exposed to view and then covered up again  
14 does not appear to match the EHCA repair records or BET&R's project records. In order to  
15 respond to Allstate's allegation I have reviewed:

- 16           • All of the Association's board meeting minutes from 1996 to 2014;
- 17           • The Declaration of Alfred Donohue in support of Allstate's Motion for Summary  
18 Judgment dated October 22, 2015, with attached documents regarding prior  
19 inspections and repairs at the Eagle Harbour condominium building;
- 20           • Additional documents provided by the Association's attorney regarding the same  
21 prior inspections and repairs; and
- 22           • The Declaration of Stephen Holland who was a member of the Association's  
23 Board of Directors at various points from 1998 to present day.

24           37.     Based upon my review of these documents and BET&R's investigations of the  
25 buildings, it is my opinion that since original construction the stucco on at least 97.05% of the  
26 exterior walls on the main buildings does not appear to have been removed either to accomplish

1 repairs or to perform investigation. As a result, at least 97.05% of the exterior-wall sheathing  
2 has never been exposed to view at any time since original construction. In other words any  
3 concealed damage to at least 97.05% of the exterior-wall sheathing has never been exposed to  
4 view. Allstate's apparent position that all of the exterior wall sheathing had been exposed to  
5 view prior to April 2014 does not appear to align with the facts and maintenance records of the  
6 Association.

7  
8 I DECLARE UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE  
9 OF WASHINGTON THAT THE FOREGOING IS TRUE AND CORRECT.

10  
11 Dated: 11/5/15

Michael Ludwig  
12 Michael Ludwig

### **CERTIFICATE OF SERVICE**

I hereby certify that on November 9, 2015, I electronically filed the foregoing with the Clerk of the Court using the CM/ECF system which will send notification of such filing to the persons listed below:

**Attorney for Defendant Allstate Insurance Company**

Alfred Donohue  
Brian Buron  
WILSON SMITH COCHRAN DICKERSON  
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206-623-4100

I certify under penalty of perjury under the laws of the State of Washington and the United States that the foregoing is true and correct.

Dated this 9th day of November, 2015, at Seattle, Washington.

/s/ Ian McDonald

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